



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D3278-041
Job Sheet 165921



Part No: D3278-041

Job Qty: 2 ea

Part Name: Support Assembly



Part Weight: 0 lbs

Status: Production

Priority: Medium

Job Created: 9/30/17

Job Tracking No:

Due Date: 10/31/17

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV C IPP: A 04.04.19 New issue KJ/JLM IPP B 07.08.21 Chg rivet per PAR185 EC Verified by: JLM

Ship Via:

Bill of Materials

Part/Part Name	Part Note	Serial No	Quantity	Location
D3278-041 Support Assembly	DWG REV C IPP: A 04.04.19 New issue KJ/JLM IPP B 07.08.21 Chg rivet per PAR185 EC Verified by: JLM		0.000	
AN4-13A Bolt			0.000	
D2230-1 Mounting Lug	DWG REV G IPP D 00.11.01 Added inspection level 8, and removed P/O for powder coat EC		0.000	
D3278-1 Support	DWG REV C IPP: A 04.04.19 New issue KJ/JLM IPP B 07.09.06 rev.c dwg EC verified by: JLM		0.000	
D3278-2 Support	DWG REV C IPP: A 04.04.19 New issue KJ/JLM IPP B 07.09.06 Rev C dwg EC Verified by: JLM		0.000	
D3278-3 Spacer	DWG REV C IPP: A 04.04.19 New issue KJ/JLM IPP B 07.09.06 Rev C dwg EC Verified by: JLM		0.000	
MS20426AD3-6 Rivet			0.000	
MS21042L4 Nut			0.000	
NAS1149D0463J Washer			0.000	

Job Routing

Op No	Operation	Qty	Due Date	Standard		Workcenter/Sup
				Setup hrs	Run Hrs	
90	Start up Operation	2 Ea	10/30/17	0.00	0.00	Start up container
120	Small Fab	2 pcs	10/31/17	0.00	0.08	Small Fab
130	QC	2 pcs	10/31/17	0.00	0.00	QC5
140	Packaging	2 pcs	10/31/17	0.00	0.00	Packaging3
150	QC21-SA	2 Ea	10/31/17	0.00	0.00	QC21

Part Op 120 - Assemble support as per Dwg D3278. ***DO NOT TIGHTEN BOLTS*** Identify as D3278-041

Descriptions: 130 - QC5- Inspect part completeness to step on W/O

140 - Identify as per dwg & Stock Location:

150 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Special Comments
D3278-041 B165921		4 Ea (2 ea)	90-Start up Operation	
D3278-3	Spacer	2 Ea (1 ea)	90-Start up Operation	
AN4-13A	Bolt	8 Ea (4 ea)	120-Small Fab	
MS21042L4	Nut	8 Ea (4 ea)	120-Small Fab	

Part: **D3278-041 B165921**
Created: 9/30/17 12:11 PM DART-MICHAUD-
FEBRILLE-VICTORIA



Serial No: **S000090**

Printed By: Goldston, Justin 10/2/17 10:45 AM

DART
AEROSPACE
S018094

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CANADA
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Email: sales@dartaero.com
www.dartaerospace.com



Support Assembly

PART NO: D3278-041
Revision:
Operation: Start up Operation
Change No:

Mfg Date: 12/06/17
Job No: 165921

NAS1149D0463J

Washer

16 Ea (8 ea)

120-Small Fab

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D3278-041 B165921	4	2	0	0
	D3278-3	2	0	0	0
120-Small Fab	AN4-13A	8	0	0	0
	MS21042L4	8	0	0	0
	NAS1149D0463J <i>SO 14753</i>	16	0	0	0

Part Specifications

Specifications could not be found.

Plex 10/1/17 3:17 PM Dart.Baker.Diane

Work Order Summary

Friday, September 29, 2017 9:08:52 AM

Page 1 of 1

Criteria : Work Order ID: 165921 Item ID: D3278-041 Product Family SMALL FAB
 Work Order Start Dates 9/13/2017 to 9/13/2017 11:59:59 PM Work Order Required Dates 9/18/2017 to 9/18/2017 11:59:59 PM
 All References
 Work Order Status Released

Work Order ID	165921	Required Qty	2.0000	Status Code	Released
Item ID	D3278-041	Accepted Qty	0.0000	Scrap Qty	0.0000
Item Name	Support Assembly				
Current Acct Value	\$93.226				
Start Date	9/13/2017	Required Date	9/18/2017	Completed Date	
Standard	** Actual **		** Acct. Value **	** Variance **	** Variance % **
Direct Costs	Total	Each	Each	Each	Each
Material	\$55.832	\$0.000	\$29.141	\$29.141	100.00%
Labor	\$27.825	\$0.000	\$16.090	\$16.090	100.00%
Outplant	\$0.000	\$0.000	\$0.002	\$0.002	100.00%
Variable Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Fixed Burden	\$79.613	\$0.000	\$43.790	\$43.790	100.00%
Material Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
** Total **	\$163.270	\$0.000	\$89.022	\$89.022	

Item ID/Item Name	Required Qty	Issue Code	Issue Date	Issued Qty	Cost Amount
D2230-1 Mounting Lug	4.0000		9/28/2017	4.0000	\$57.168
D3278-1 Support	2.0000		9/28/2017	2.0000	\$85.704
D3278-3 Spacer	2.0000		9/27/2017	2.0000	\$7.689
MS20426AD3-6 Rivet	8.0000		9/27/2017	8.0000	\$0.062
Total Matl Amts:					\$150.623

Work Center Small Fab

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
BOUC02												
9/27/2017												
100			0.00	0.00	0.17	0.17	1.00	\$0.000	\$3.441	\$9.207	\$0.000	\$12.648
Total:			0.00	0.00	0.17	0.17	1.00	\$0.000	\$3.441	\$9.207	\$0.000	\$12.648

* Glossy Black *

Work Order ID 165921

165921

Page 1

Wednesday, September 06, 2017 9:30:25 AM

Item ID: D3278-041 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Support Assembly

Start Date: 9/13/2017 Start Qty: 2.00 *2* Cust Item ID:
Required Date: 9/18/2017 Req'd Qty: 2.00 *2* Customer:

Reference:

Approvals: Process Plan: W Date: SEP 07 2017 Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3278	Rev C
-------	-------

100 0.00

100

Small Fab

Small Fab

Memo

0.07

Small Fab

Rivet spacers with support as per Dwg D3278.

2x 17/09/27 36 9-89

110 QC5- Inspect part completeness to step on W/O 0.00

110

QC

Memo

0.04

Quality Control

DAS
30
9-89

(2)

SEP 27 2017

120 0.00

120

Small Fab

Small Fab

Memo

0.06

Small Fab

Assemble support as per Dwg D3278.***DO NOT TIGHTEN
BOLTS***Identify as D3278-041

Wednesday, September 06, 2017 9:30:25 AM

165921

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 9/13/2017 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 9/18/2017 **Req'd Qty:** 2.00 ***~***

Customer:

Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.04

Quality Control

140

Identify as per dwg & Stock Location: _____

0.00

140

Packaging

Memo

0.02

Packaging

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.20

Quality Control

Picklist Print

Page 1

Wednesday, September 06, 2017 9:30:24 AM

Work Order ID: 165921

165921

Parent Item: D3278-041

D3278-041

Parent Item Name: Support Assembly

Start Date: 9/13/2017

Required Date: 9/18/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP: A04.04.19New issueKJ/JLM
IPP B 07.08.21 Chg rivet per PAR185 EC Verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN4-13A		Purchased		No		120	Each	202.0000	2	4			
---------	--	-----------	--	----	--	-----	------	----------	---	---	--	--	--

AN4-13A

Bolt

Location	Loc Qty	Loc Code
FG	20	
122808	20	
GA	9	
m135470	9	
ST344	173	
m138326	173	

D2230-1

Manufactured No

120 Each 122.0000 2

D2230-1

Mounting Lug

USE B: 165937

4 12/9/22

Location	Loc Qty	Loc Code
FG	2	
150062	2	
ST521	120	
159480	20	
162696	100	

D3278-1

Manufactured No

100 Each 34.0000 1 2

D3278-1

Support

USE B: 165953

17/09/27 DAS 36 9-80

Location	Loc Qty	Loc Code
GA	34	
156230	1	
162841	33	

165953
(2x)

Picklist Print

Wednesday, September 06, 2017 9:30:24 AM

Page 2

Work Order ID: 165921

165921

Parent Item: D3278-041

D3278-041

Parent Item Name: Support Assembly

Start Date: 9/13/2017

Required Date: 9/18/2017

Start Qty: 2.00

Required Qty: 2.00

D3278-2

Manufactured No

100

Each

24.0000

1

2

D3278-2

Support

17/09/27 DAS 36 9-80

Location

Loc Qty

Loc Code

GA

24

162830

24

D3278-3

Manufactured No

100

Each

44.0000

1

2

D3278-3

Spacer

166179 (2x) 17/09/27 DAS 36 9-80

Location

Loc Qty

Loc Code

GA

44

162921

44

MS20426AD3-6

Purchased No

120

Each

1,752.000

4

8

MS20426AD3-6

Rivet

165738 (2x) 17/09/27 DAS 36 9-80

Location

Loc Qty

Loc Code

GA

904

M133988

904

ST312

848

M133988

848

8

Picklist Print

Page 3

Wednesday, September 06, 2017 9:30:24 AM

Work Order ID: 165921

165921

Parent Item: D3278-041

D3278-041

Parent Item Name: Support Assembly

Start Date: 9/13/2017

Required Date: 9/18/2017

Start Qty: 2.00

Required Qty: 2.00

MS21042L4 Purchased No 100 Each 2,271.000 2 4

MS21042L4

Nut

Location

Loc Qty

Loc Code

FP001

10

m133363

10

OVER007

1000

m138170

500

m138230

500

ST303

1261

m138084

261

m138326

1000

NAS1149D0463J Purchased No 120 Each 2,218.000 4 8

NAS1149D0463J

Washer

Location

Loc Qty

Loc Code

GA

547

M135056

40

M137699

507

Return2017

16

M136665

16

ST263

1655

M137988

600

M138084

27

M138230

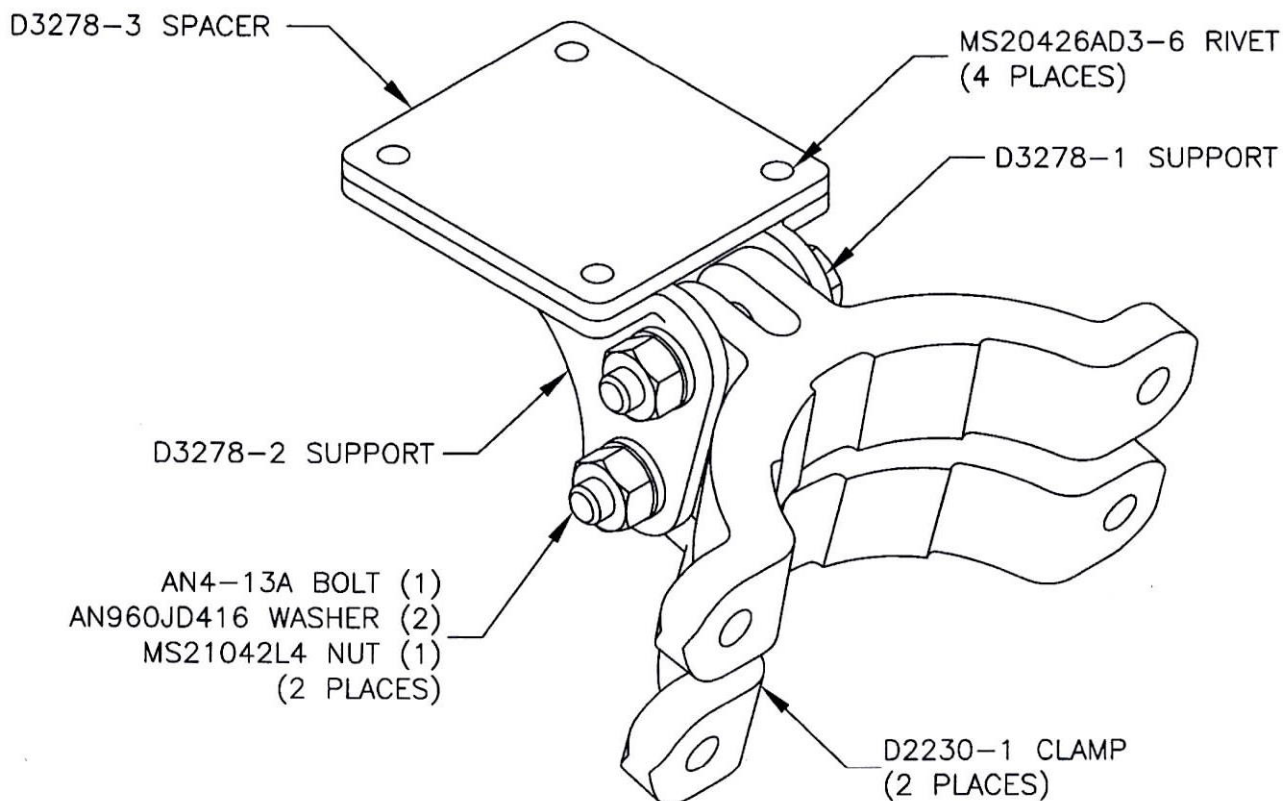
1028



DESIGN <i>97</i>	DRAWN BY <i>BC</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>JB</i>	APPROVED <i>H</i>	DRAWING NO. D3278	REV. C SHEET 1 OF 3
DATE 07.07.24	TITLE SUPPORT ASSEMBLY		SCALE NTS
A	04.03.03	NEW ISSUE	
B	05.03.31	CHANGE DIM/TOL TO ENSURE FIT	
C	07.07.24	CHANGED RIVETS PER PAR #185	

RELEASED
07 08-08

D3278-041 SUPPORT ASSEMBLY



SEP 07 2017

SHOP COPY
RETURN TO
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

NO. *165921*

uy

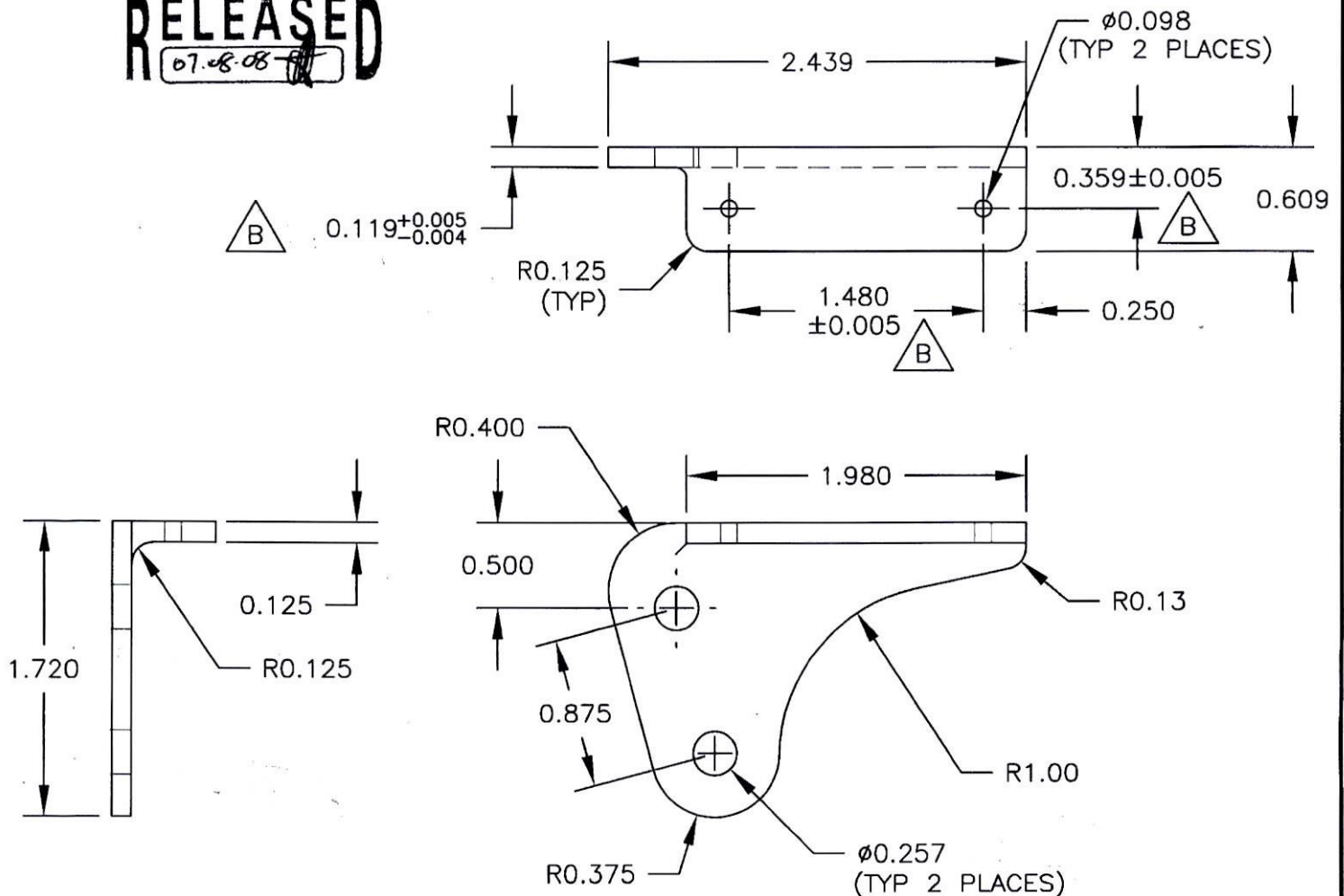
Qty	Part Number	Description
X	D3278-041	SUPPORT ASSEMBLY
2	D2230-1	CLAMP
1	D3278-1	SUPPORT
1	D3278-2	SUPPORT
1	D3278-3	SPACER
2	AN4-13A	BOLT
4	AN960JD416	WASHER
4	MS20426AD3-6	RIVET
2	MS21042L4	NUT

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DART

DESIGN 901	DRAWN BY BC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED B	APPROVED H	DRAWING NO. D3278	REV. C SHEET 2 OF 3
DATE 07.07.24	TITLE SUPPORT ASSEMBLY		SCALE 1:1

RELEASED
07.08.08**D3278-1 SUPPORT (SHOWN)****D3278-2 SUPPORT (OPPOSITE)**

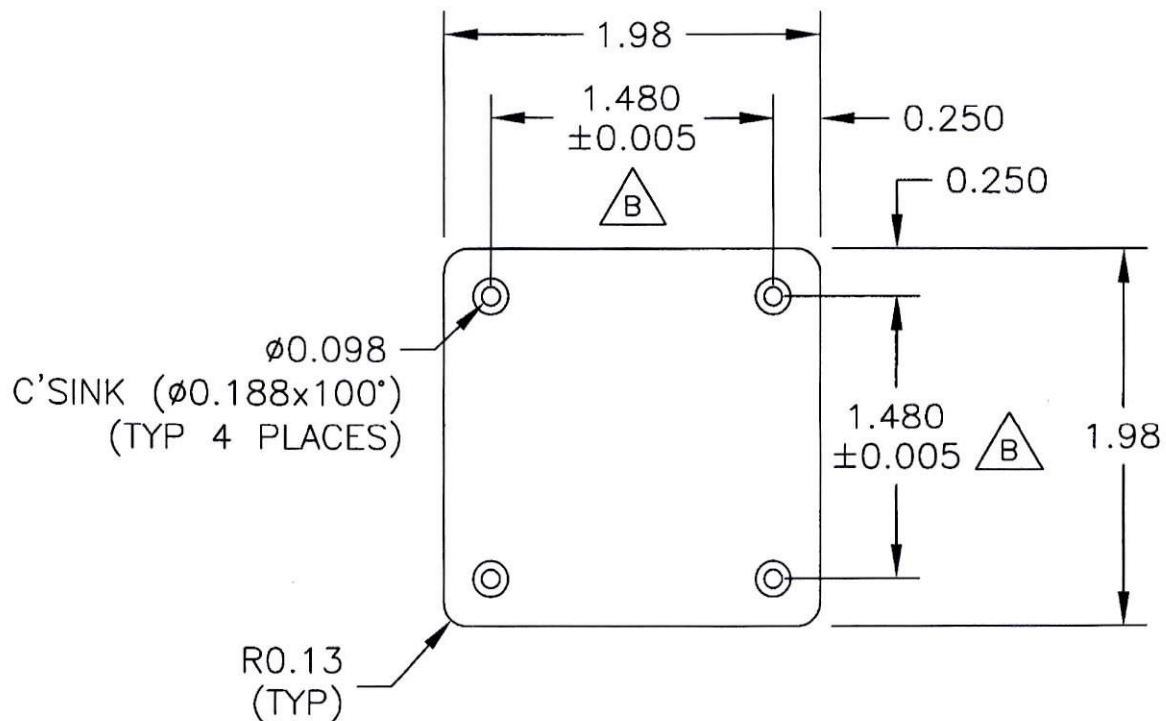
- 1) MACHINE PER DWG FILE "D3278-1.SLDPRT"
- 2) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B)
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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DART

DESIGN 97	DRAWN BY BC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 13	APPROVED [Signature]	DRAWING NO. D3278	REV. C SHEET 3 OF 3
DATE 07.07.24	TITLE SUPPORT ASSEMBLY		SCALE 1:1

RELEASED
07.08.08**D3278-3 SPACER**

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL
(REF. DART SPEC. M-DELRIN-B0.125x2.000) OR
DELRIN II 150E OR ACETRON GP ACETAL
(REF. DART SPEC. M-DELRIN-S.125)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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